

Notes filled in!

Name: _____

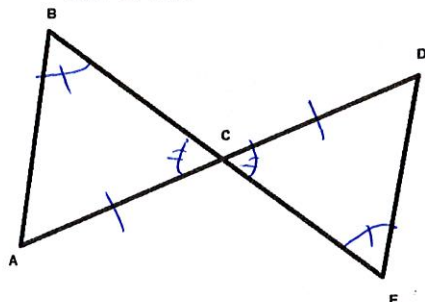
Date: _____

Per.: _____

Notes and Practice: CPCTC

What is CPCTC?? Corresponding parts of congruent triangles are congruent

Given: $\angle B \cong \angle E$
 $\overline{AC} \cong \overline{DC}$

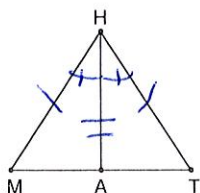


Prove: $\overline{AB} \cong \overline{DE}$

Statements	Reasons
1. $\angle B \cong \angle E$	1. Given
2. $\overline{AC} \cong \overline{DC}$	2. Given
3. $\angle BCA \cong \angle ECD$	3. Vertical angles are \cong
4. $\triangle BCA \cong \triangle ECD$	4. AAS
5. $\overline{AB} \cong \overline{DE}$	5. <u>CPCTC</u>

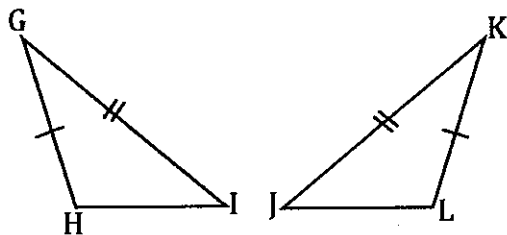
Given: \overline{HA} bisects $\angle MHT$
 $\overline{MH} \cong \overline{HT}$

Prove: A is the midpoint of \overline{MT}



Statements	Reasons
1. \overline{HA} bisects $\angle MHT$	1. Given
2. $\overline{MH} \cong \overline{HT}$	2. Given
3. $\angle MHA \cong \angle THA$	3. Def. of bisector
4. $\overline{HA} \cong \overline{HA}$	4. Reflexive Property
5. $\triangle MAH \cong \triangle TAH$	5. SAS
6. $\overline{MA} \cong \overline{TA}$	6. <u>CPCTC</u>
7. A is the midpoint of \overline{MT}	7. def. of midpoint

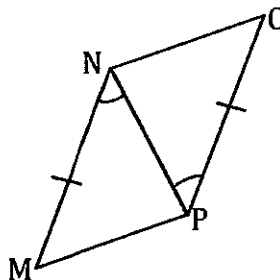
Given: $\overline{GH} \cong \overline{KL}$, $\angle G \cong \angle K$, and $\overline{GI} \cong \overline{KJ}$



Prove: $\overline{HI} \cong \overline{LJ}$

Statements	Reasons
1. $\overline{GH} \cong \overline{KL}$	1. Given
2.	2. Given
3. $\overline{GI} \cong \overline{KJ}$	3.
4.	4. SAS
5. $\overline{HI} \cong \overline{LJ}$	5.

Given: $\angle MNP \cong \angle OPN$, and $\overline{MN} \cong \overline{OP}$



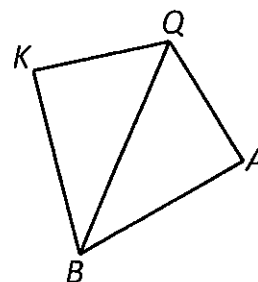
Prove: $\overline{MP} \cong \overline{NO}$

Statements	Reasons
1.	1. Given
2. $\overline{MN} \cong \overline{OP}$	2.
3. $\overline{NP} \cong \overline{NP}$	3.
4. $\triangle MNP \cong \triangle OPN$	4.
5.	5. CPCTC

2. Complete the two-column proof.

Given: $\overline{QK} \cong \overline{QA}$, \overline{QB} bisects $\angle KQA$

Prove: $\overline{KB} \cong \overline{AB}$



Statements	Reasons
1. _____	1. Given
2. \overline{QB} bisects $\angle KQA$	2. _____
3. _____	3. Definition of Bisector
4. _____	4. Reflexive Property of Congruence
5. $\triangle KBQ \cong \triangle$ _____	5. _____ Congruence Postulate
6. _____	6. _____